AGREEMENT FOR CONSULTING SERVICES

THIS AGREEMENT ("Agreement") is made and entered into this 21st day of September 2021 between the City of Paramount, a municipal corporation in Los Angeles County, California, (hereinafter "CITY") and Technical and Business Systems (hereinafter "CONSULTANT") (collectively, "the Parties").

RECITALS

WHEREAS, CITY and CONSULTANT each desire to enter into an Agreement whereby CONSULTANT will perform air monitoring services for CITY; and

WHEREAS, CITY staff does not have the immediate resources to perform this work in-house.

NOW, THEREFORE, BE IT RESOLVED BY AND BETWEEN THE PARTIES AS FOLLOWS:

1. DESCRIPTION OF SERVICES

CONSULTANT shall perform all required services to CITY as more particularly described in CONSULTANT'S scope of services within the air monitoring proposal (inclusive of Air Monitoring Plan, Community Outreach, and Project Timeline) hereto as Exhibit "A" and incorporated herein by reference as if fully set forth. In the event of any conflict between CONSULTANT'S proposal and this Agreement, the terms of this Agreement shall apply.

2. COMPENSATION

(a) CITY agrees to pay CONSULTANT as full compensation for all services and duties performed, except as otherwise provided herein, the total sum of not to exceed **$165,377.00**.

(b) CONSULTANT shall render an itemized invoice to CITY every thirty (30) days for services performed during the prior period which shall be paid upon its approval by CITY, which said approval shall not be unreasonably withheld.

3. INDEPENDENT CONTRACTOR

In the performance of the services in this Agreement, CONSULTANT is an independent contractor and is not an agent or employee of CITY. CONSULTANT, its officers, employees, agents, and subcontractors, if any, shall have no power to bind or commit CITY to any decision or course of action, and shall not represent to any person or business that they have such power. CONSULTANT has and shall retain the right to exercise full control of the supervision of the services and over the employment, direction, compensation, and discharge of all persons assisting CONSULTANT in the performance

of said service hereunder. CONSULTANT shall be solely responsible for all matters relating to the payment of its employees, including compliance with social security and income tax withholding, workers' compensation insurance, and all other regulations governing such matters.

Neither CONSULTANT, nor any of CONSULTANT's officers, employees or agents, shall obtain any rights to retirement, health care, or any other benefits which may otherwise accrue to CITY'S employees. CONSULTANT expressly waives any claim CONSULTANT may have to any such rights.

5. AMENDMENT

Except as otherwise stated herein, any and all obligations of CITY and CONSULTANT are fully set forth and described in this Agreement. Any changes in this Agreement, including any increase or decrease in the amount of compensation or any change in the term, which shall be mutually agreed upon by and between CITY and CONSULTANT, shall be set forth in written amendments to this Agreement.

6. NONDISCRIMINATION

(a) CONSULTANT shall not discriminate in the conduct of the work under this Agreement against any employee, applicant for employment, or volunteer on the basis of race, religious creed, color, national origin, ancestry, physical or mental disability, marital status, pregnancy, sex, age, sexual orientation, or other prohibited basis.

(b) Consistent with CITY's policy that harassment and discrimination are unacceptable employer/employee conduct, CONSULTANT agrees that harassment or discrimination directed toward a job applicant, a City employee, or a citizen by CONSULTANT or CONSULTANT's employee or subcontractor on the basis of race, religious creed, color, national origin, ancestry, physical or mental disability, marital status, pregnancy, sex, age, sexual orientation, or other prohibited basis will not be tolerated. CONSULTANT agrees that any and all violation of this provision shall constitute a material breach of the Agreement.

7. INDEMNIFICATION

(a) To the fullest extent permitted by law, CONSULTANT shall defend, indemnify, and hold harmless, the CITY, its officers, employees and agents from and against any and all claims, lawsuits, damage, injury, and liability for damages arising in the performance of CONSULTANT's services under this Agreement. The CITY shall not be responsible for claims, losses, damage, injury, or liability for damages resulting from CONSULTANT.

(b) Further, CONSULTANT will indemnify CITY, and hold it harmless, from an assertion that as a result of providing services to CITY, CONSULTANT, or any of its employees or persons performing work pursuant to this Agreement is entitled to benefits

from, or is covered by, the Social Security retirement system or the California Public Employees Retirement Systems. Notwithstanding the foregoing, however, CONSULTANT's obligations for any payments to such claimant shall be limited to those payments which CITY may be required to pay.

8. CONFLICTS OF INTEREST.

(a) CONSULTANT covenants that neither it, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, which would conflict in any manner with the interests of CITY or which would in any way hinder CONSULTANT's performance of services under this AGREEMENT. CONSULTANT further covenants that in the performance of this AGREEMENT, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor without the express written consent of the City Manager. CONSULTANT agrees to at all times avoid conflicts of interest or the appearance of any conflicts of interest with the interests of CITY in the performance of this AGREEMENT.

(b) CITY understands and acknowledges that CONSULTANT is, as of the date of execution of this AGREEMENT, independently involved in the performance of non-related services for other governmental agencies and private parties. CONSULTANT is unaware of any stated position of CITY relative to such projects. Any future position of CITY on such projects shall not be considered a conflict of interest for purposes of this section.

9. CONFIDENTIAL INFORMATION; RELEASE OF INFORMATION.

(a) All information gained, or work product produced by CONSULTANT in performance of this AGREEMENT shall be considered confidential, unless such information is in the public domain or already known to CONSULTANT. CONSULTANT shall not release or disclose any such information or work product to persons or entities other than CITY without prior written authorization from the City Manager, except as may be required by law.

(b) CONSULTANT, its officers, employees, agents or subcontractors, shall not, without prior written authorization from the City Manager or unless requested by the City Attorney of CITY, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this AGREEMENT. Response to a subpoena or court order shall not be considered "voluntary" provided CONSULTANT gives CITY notice of such court order or subpoena.

(c) If CONSULTANT, or any officer, employee, agent or subcontractor of CONSULTANT, provides any information or work product in violation of this AGREEMENT, then CITY shall have the right to reimbursement and indemnity from CONSULTANT for any damages, costs and fees, including attorneys fees, caused by or incurred as a result of CONSULTANT's conduct.

(d) CONSULTANT shall promptly notify CITY should CONSULTANT, its officers, employees, agents or subcontractors be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this AGREEMENT and the work performed thereunder. CITY retains the right, but has no obligation, to represent CONSULTANT or be present at any deposition, hearing or similar proceeding. CONSULTANT agrees to cooperate fully with CITY and to provide CITY with the opportunity to review any response to discovery requests provided by CONSULTANT. However, this right to review any such response does not imply or mean the right by CITY to control, direct, or rewrite said response.

10. INSURANCE

(a) Required Coverage. Without limiting CONSULTANT's indemnification, it is agreed that CONSULTANT shall maintain in force at all times during the term of this Agreement the following types of insurance providing coverage on an "occurrence" basis.

☒ Automobile insurance for the vehicle(s) CONSULTANT uses in connection with the performance of this Agreement. Coverage: $1,000,000 per occurrence for bodily injury and property damage.

☒ Comprehensive General Liability Insurance, with minimum limits of One Million ($1,000,000.00) Dollars for each occurrence and in the aggregate, combined single limit, against any personal injury, death, loss, or damage resulting from the wrongful or negligent acts by CONSULTANT.

☒ Worker's Compensation insurance to cover its employees as required by the Labor Code of the State of California. CONSULTANT's worker's compensation insurance shall include the following language: "All rights of subrogation are hereby waived against the CITY, its officers and employees when acting within the scope of their appointment or employment." In the event any class of employees engaged in hazardous work under this Agreement is not protected under Workers' Compensation Statutes, the CONSULTANT shall provide adequate and suitable insurance for the protection of its employees not otherwise protected.

☒ E&O/Professional's Liability, errors and omissions liability insurance appropriate to the CONSULTANT's profession. Coverage: $1,000,000 per Claim.

(b) General Provisions.

(i) CONSULTANT shall obtain insurance acceptable to the CITY in a company or companies admitted in California and with a Best rating of no less than A VII or as acceptable to the CITY.

(ii) It shall be a requirement under this contract that any available insurance proceeds broader than or in excess of the specified minimum insurance coverage requirements and/or limits shall be available to the Additional Insured. Furthermore, the requirements for coverage and limits shall be (1) the broader coverage and maximum limits specified in this contract; or (2) the broader coverage and maximum limits of coverage of any insurance policy or proceeds available to the named insured; whichever is greater.

(iii) The limits of insurance required in the Agreement may be satisfied by a combination of primary and umbrella or excess insurance. Any umbrella or excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and non-contributory basis for the benefit of the CITY (if agreed to in a written contract) before the CITY's own insurance or self-insurance shall be called upon to protect it as a named insured.

(iv) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the CITY, its elected or appointed officers, officials, employees, agents, or volunteers.

(v) The insurance provided by these policies shall not be suspended, voided, canceled, or reduced in coverage or in limits except after thirty (30) days written notice has been received by the CITY.

(c) Deductibles and Self-Insured Retentions. All self-insured retentions (SIR) must be disclosed to the CITY's Risk Management for approval and shall not reduce the limits of liability. At the option of CITY, either: the insurer shall reduce or eliminate such deductibles or self-insurance retention as respects the CITY, its officers, officials, agents, employees, and volunteers; or CONSULTANT shall procure a bond guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

11. WORKERS' COMPENSATION

(a) Covenant to Provide. CONSULTANT warrants that it is aware of the provisions of the California Labor Code which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code. CONSULTANT further agrees that it will comply with such provisions before commencing the performance of the work under this Agreement.

(b) Waiver of Subrogation. CONSULTANT and CONSULTANT's insurance company agree to waive all rights of subrogation against CITY, its elected or appointed officials, agents, and employees for losses paid under CONSULTANT's workers'

compensation insurance policy which arise from the work performed by CONSULTANT for CITY.

12. TERMINATION OF AGREEMENT

(a) This Agreement may be terminated at any time, with or without cause, by either party upon thirty (30) days prior written notice.

(b) In the event of termination or cancellation of this Agreement by CONSULTANT or CITY, due to no fault or failure of performance by CONSULTANT, CONSULTANT shall be paid compensation for all services performed by CONSULTANT, in an amount to be determined as follows; for work done in accordance with all of the terms and provisions of this Agreement, CONSULTANT shall be paid an amount equal to the hours of service performed prior to the effective date of termination or cancelation in accordance with the work items provided.

13. ENFORCED DELAY; EXTENSION OF TIMES OF PERFORMANCE

Performance by either party hereunder shall not be deemed to be in default, and all performance and other dates specified in this Agreement shall be extended, where the party seeking the extension has acted diligently and delays or defaults are due to events beyond the reasonable control of the party, including, but not limited to: war; insurrection; strikes; lockouts; riots; floods; earthquakes; fires; casualties; acts of God; acts of the public enemy; epidemics; health pandemics; quarantine restrictions; freight embargoes; lack of transportation; governmental restrictions or priority; litigation; unusually severe weather; acts or omissions of another party; or any other causes beyond the control or without the fault of the party claiming an extension of time to perform. Notwithstanding anything to the contrary in this Agreement, an extension of time for any such cause shall be for the period of the enforced delay and shall commence to run from the time of the commencement of the cause. Notice of such enforced delay shall be promptly given by the party claiming the benefit of such delay.

14. OWNERSHIP OF DOCUMENTS

All documents prepared, developed or discovered by CONSULTANT in the course of providing any services pursuant to this AGREEMENT shall become the sole property of CITY.

15. ASSIGNMENT

The expertise and experience of CONSULTANT are material considerations for this AGREEMENT. CITY has an interest in the qualifications of and capability of the persons and entities who will fulfill the duties and obligations imposed upon CONSULTANT under this AGREEMENT. In recognition of that interest, CONSULTANT shall not assign or transfer this AGREEMENT or any portion of this AGREEMENT or the performance of any

of CONSULTANT's duties or obligations under this AGREEMENT without the prior written consent of the CITY.

16. LAW TO GOVERN; VENUE

This AGREEMENT shall be interpreted, construed and governed according to the laws of the State of California. In the event of litigation between the parties, venue in state trial courts shall lie exclusively in the County of Los Angeles.

17. ATTORNEYS FEES, COSTS AND EXPENSES

In the event litigation or other proceeding is required to enforce or interpret any provision of this AGREEMENT, the prevailing party in such litigation or other proceeding shall be entitled to an award of reasonable attorney's fees, costs and expenses, in addition to any other relief to which it may be entitled.

18. ENTIRE AGREEMENT

This AGREEMENT is the entire, complete, final and exclusive expression of the parties with respect to the matters addressed therein and supersedes all other AGREEMENTs or understandings, whether oral or written, or entered into between CONSULTANT and CITY prior to the execution of this AGREEMENT. No statements, representations or other AGREEMENTs, whether oral or written, made by any party which are not embodied herein shall be valid and binding. No amendment to this AGREEMENT shall be valid and binding unless in writing duly executed by the parties or their authorized representatives.

19. NOTICES

Written communications and invoices under this agreement shall be addressed as follows:

To CITY:	City of Paramount Planning Department 16400 Colorado Blvd Paramount, CA 90723
To CONSULTANT:	Technical & Business Systems, Inc. 25570 Rye Canyon Road, Unit J Valencia, CA 91355

20. This Agreement shall be deemed to have been executed and entered in the City of Paramount, County of Los Angeles, and State of California.

IN WITNESS WHEREOF, the undersigned execute this Agreement on the date first written above.

CITY OF PARAMOUNT:

BY: _____
John Moreno, City Manager

CONSULTANT (T&B Systems):

BY: _____ 10/1/21
David Yoho, Project Manager

ATTEST:

_____
Heidi Luce, City Clerk

APPROVED AS TO FORM:

_____
John E. Cavanaugh, City Attorney

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read Instructions before completing form.

I. A. Applicant/Recipient (Name, Address, City, State, Zip Code)

Name: City of Paramount

Address: 16400 Colorado Avenue

City: Paramount

State: CA: California Zip Code: 90723-3442

B. DUNS No. 004947602

II. Is the applicant currently receiving EPA Assistance? ☐ Yes ☒ No

III. List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

Not applicable

IV. List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective actions taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

Not applicable

V. List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3))

Not applicable

VI. Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below.

☐ Yes ☒ No

a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b).

☐ Yes ☒ No

b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. 7.70) applies.

Not applicable

VII. Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its program or activities? (40 C.F.R 5.140 and 7.95)	☒ Yes	☐ No
a. Do the methods of notice accommodate those with impaired vision or hearing?	☒ Yes	☐ No
b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications?	☒ Yes	☐ No
c. Does the notice identify a designated civil rights coordinator?	☒ Yes	☐ No
VIII. Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. 7.85(a))	☒ Yes	☐ No
IX. Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166)	☒ Yes	☐ No

X. If the applicant is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator.

Not applicable

XI. If the applicant is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet Address for, or a copy of, the procedures.

Not applicable

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official	B. Title of Authorized Official	C. Date
Ivan Reyes	Planning Director	03/25/2022

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statures and EPA regulations.

A. *Signature of Authorized EPA Official	B. Title of Authorized Official	C. Date

*** See Instructions**

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General. Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.
Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment). Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities. Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities. The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission. Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution. 40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972. 40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973. The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items "Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed. "Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability. Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission. If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable." In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification. * Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.

EPA KEY CONTACTS FORM

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name: Prefix: | First Name: John | Middle Name:
Last Name: Carver | Suffix:
Title: Planning Director

Complete Address:

Street1: 16400 Colorado Avenue
Street2:
City: Paramount | State: CA: California
Zip / Postal Code: 90723 | Country: USA: UNITED STATES
Phone Number: 562-220-2048 | **Fax Number:**
E-mail Address: jcarver@paramountcity.com

Payee: *Individual authorized to accept payments.*

Name: Prefix: | First Name: Kim | Middle Name:
Last Name: Sao | Suffix:
Title: Finance Director

Complete Address:

Street1: 16400 Colorado Avenue
Street2:
City: Paramount | State: CA: California
Zip / Postal Code: 90723 | Country: USA: UNITED STATES
Phone Number: 562-220-2207 | **Fax Number:**
E-mail Address: ksao@paramountcity.com

Administrative Contact: *Individual from Sponsored Programs Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc).*

Name: Prefix: | First Name: Ivan | Middle Name:
Last Name: Reyes | Suffix:
Title: Associate Planner

Complete Address:

Street1: 16400 Colorado Avenue
Street2:
City: Paramount | State: CA: California
Zip / Postal Code: 90723 | Country: USA: UNITED STATES
Phone Number: 562-220-2060 | **Fax Number:**
E-mail Address: ireyes@paramountcity.com

EPA KEY CONTACTS FORM

Project Manager: *Individual responsible for the technical completion of the proposed work.*

Name: Prefix: | First Name: Ivan | Middle Name:

Last Name: Reyes | Suffix:

Title: Associate Planner

Complete Address:

Street1: 16400 Colorado Avenue

Street2:

City: Paramount | State: CA: California

Zip / Postal Code: 90723 | Country: USA: UNITED STATES

Phone Number: 562-220-2060 | **Fax Number:**

E-mail Address: ireyes@paramountcity.com

Other Attachment File(s)

*** Mandatory Other Attachment Filename:** 1234-Mandatory attachment- ParamountCityGrant.pdf

Add Mandatory Other Attachment | Delete Mandatory Other Attachment | View Mandatory Other Attachment

To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment | Delete Optional Other Attachment | View Optional Other Attachment

Project Narrative File(s)

*** Mandatory Project Narrative File Filename:** 1241-Project Narrativev2.pdf

Add Mandatory Project Narrative File | Delete Mandatory Project Narrative File | View Mandatory Project Narrative File

To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File | Delete Optional Project Narrative File | View Optional Project Narrative File

OMB Number: 4040-0004
Expiration Date: 12/31/2022

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 03/25/2022

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: City Of Paramount

* b. Employer/Taxpayer Identification Number (EIN/TIN): 95-6005780

* c. Organizational DUNS: 0049476020000

d. Address:

* Street1: 16400 Colorado Avenue
Street2:
* City: Paramount
County/Parish:
* State: CA: California
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 90723-3442

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:
* First Name: Ivan
Middle Name:
* Last Name: Reyes
Suffix:

Title:

Organizational Affiliation:

* Telephone Number: 562-220-2060
Fax Number:

* Email: ireyes@paramountcity.com

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.034

CFDA Title:

Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act

*** 12. Funding Opportunity Number:**

EPA-OAR-OAQPS-22-01

* Title:

Enhanced Air Quality Monitoring for Communities

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

Continue air monitoring services for hexavalent chromium for additional two years.

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant: CA-40 | * b. Program/Project: CA-40

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 11/01/2022 | * b. End Date: 11/01/2024

18. Estimated Funding ($):

* a. Federal	319,754.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	319,754.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☒ a. This application was made available to the State under the Executive Order 12372 Process for review on 03/23/2022.

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☐ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: | * First Name: John

Middle Name:

* Last Name: Carver

Suffix:

* Title: Planning Director

* Telephone Number: 562-220-2048 | Fax Number:

* Email: jcarver@paramountcity.com

* Signature of Authorized Representative: Ivan Reyes | * Date Signed: 03/25/2022

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 02/28/2022

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. Personnel	66.064	$ 0.00	$ 0.00	$ 161,348.00	$ 0.00	$ 161,348.00
2. Travel	66.034	0.00	0.00	7,616.00	0.00	7,616.00
3. 1) Equipment 2) Supplies	66.034	0.00	0.00	130,620.00	0.00	130,620.00
4. 1) Contractual 2) Other	66.034	0.00	0.00	20,170.00	0.00	20,170.00
5. Totals		$ 0.00	$ 0.00	$ 319,754.00	$ 0.00	$ 319,754.00

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SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY				Total
	(1) Personnel	(2) Travel	(3) 1) Equipment 2) Supplies	(4) 1) Contractual 2) Other	(5)
a. Personnel	$ 161,348.00	$ 0.00	$ 0.00	$ 0.00	$ 161,348.00
b. Fringe Benefits	0.00	0.00	0.00	0.00	0.00
c. Travel	0.00	7,616.00	0.00	0.00	7,616.00
d. Equipment	0.00	0.00	1,700.00	0.00	1,700.00
e. Supplies	0.00	0.00	128,920.00	0.00	128,920.00
f. Contractual	0.00	0.00	0.00	18,280.00	18,280.00
g. Construction	0.00	0.00	0.00	0.00	0.00
h. Other	0.00	0.00	0.00	1,890.00	1,890.00
i. Total Direct Charges (sum of 6a-6h)	161,348.00	7,616.00	130,620.00	20,170.00	$ 319,754.00
j. Indirect Charges	0.00	0.00	0.00	0.00	$ 0.00
k. TOTALS (sum of 6i and 6j)	$ 161,348.00	$ 7,616.00	$ 130,620.00	$ 20,170.00	$ 319,754.00
7. Program Income	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00

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SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program	(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8. Personnel	$ 0.00	$ 0.00	$ 0.00	$ 0.00
9. Travel	0.00	0.00	0.00	0.00
10. 1) Equipment 2) Supplies	0.00	0.00	0.00	0.00
11. 1) Contractual 2) Other	0.00	0.00	0.00	0.00
12. TOTAL (sum of lines 8-11)	$ 0.00	$ 0.00	$ 0.00	$ 0.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
14. Non-Federal	$ 0.00	0.00	0.00	0.00	0.00
15. TOTAL (sum of lines 13 and 14)	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program	FUTURE FUNDING PERIODS (YEARS) (b)First	(c) Second	(d) Third	(e) Fourth
16. Personnel	$ 0.00	$ 0.00	$ 0.00	$ 0.00
17. Travel	0.00	0.00	0.00	0.00
18. 1) Equipment 2) Supplies	0.00	0.00	0.00	0.00
19. 1) Contractual 2) Other	0.00	0.00	0.00	0.00
20. TOTAL (sum of lines 16 - 19)	$ 0.00	$ 0.00	$ 0.00	$ 0.00

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges: 0

22. Indirect Charges: 0

23. Remarks: Not applicable

IVAN REYES-GARAY

Gardena, CA email: eyevin247@gmail.com

Education

CALIFORNIA STATE POLYTECHNIC UNIVERSITY, POMONA, CA

- Bachelors of Science in Urban and Regional Planning

Professional Experience

PLANNING DEPARTMENT, PARAMOUNT, CA

Associate Planner, January 2021- Present

- Prepares and presents staff reports on development proposals to the Planning Commission, City Council, or other committees; makes presentations in staff meetings and at public workshops.
- Performs environmental impact review of projects in accordance with the California Environmental Quality Act (CEQA); prepares initial studies and CEQA documents of increasing complexity.
- Prepares and coordinates special planning, zoning, and environmental studies; assembles and drafts reports and findings.
- Develops planning studies and reports in support of new and updated plans, programs and regulations.

COMMUNITY DEVELOPMENT DEPARTMENT, WESMINSTER, CA

Planning Technician, February 2018- December 2020

- Assist the public at the counter, on the phone, answering questions and providing information regarding zoning, development standards and approved proposals.
- Advise the public in the preparation and filing of applications for zoning code amendments, variances, tentative tract maps, site development permits, use permits and other requests for service.
- Perform plan checks for zoning code compliance and reviews and approves designated permit applications.
- Review applications and analyze requests for conformance with the General Plan and Zoning Ordinance, develop and present recommendations for approval, modification or denial.
- Prepare and present staff reports to the Planning Commission for consideration.

COMMUNITY DEVELOPMENT DEPARTMENT, WESMINSTER, CA

Planning Technician, February 2018- Present

- Assist the public at the counter, on the phone, answering questions and providing information regarding zoning, development standards and approved proposals.
- Advise the public in the preparation and filing of applications for zoning code amendments, variances, tentative tract maps, site development permits, use permits and other requests for service.
- Perform plan checks for zoning code compliance and reviews and approves designated permit applications.
- Review applications and analyze requests for conformance with the General Plan and Zoning Ordinance, develop and present recommendations for approval, modification or denial.
- Prepare and present staff reports to the Planning Commission for consideration.

PLANNING AND BUILDING DEPARTMENT, SOUTH PASADENA, CA

Planning Management Intern, June 2017 – February 2018

- Provided development standards inquiries and requests from outside agencies, organizations, and the public through the counter, phone, and email.
- Performed plan checks for zoning compliance and consistency with design guidelines and Secretary of Interior standards.
- Processed various development applications such as Certificate of Appropriateness, Hillside Development Permits, and Temporary Use Permits.
- Conducted field inspections by verifying with construction plans for rough and final planning approval.

COMMUNITY DEVELOPMENT DEPARTMENT, SOUTH GATE, CA

Planning Intern, January 2017 – July 2017

- Provided information and assistance at the public counter and over the telephone to the public, developers, property owners, other departments, and outside agencies regarding Zoning Ordinance and General Plan.
- Checked plans for zoning compliance and consistency with square footage calculations.

Additional Skills

- Expert in Microsoft Office (Word, Excel, Publisher, PowerPoint)
- Expert in Adobe Creative Suite (Illustrator, Photoshop, InDesign)
- Proficient in ESRI ArcMap GIS, GovClarity
- Knowledgeable in General Plan, CEQA, and Zoning Code guidelines.
- Bilingual in Spanish and English

T&B Systems
environmental research associates

August 23, 2021

John Carver
City of Paramount Planning Department
16400 Colorado Avenue
Paramount, CA 90723

Subject: Request for Proposals for Air Monitoring Services

Dear John:

Technical & Business Systems (T&B Systems) is pleased to offer our services to provide air monitoring services to the City of Paramount. T&B Systems is a California certified small business based in Los Angeles County. Work will be based out of our offices located in Valencia, California.

The enclosed proposal details our approach, experience, staff qualifications, and project cost. All conditions contained in the proposal are valid for a period of 90 days. We agree to provide proof of insurance upon award of the contract. If you have any proposal or technical questions, please do not hesitate to contact David Yoho at (661) 294-1103.

Sincerely,

David H. Bush

David Bush
President

25570 Rye Canyon Road, Unit J, Valencia, CA 91355 • 661.294.1103 fax 661.294.0236
3739 Pleasant Valley Road, Unit C, Placerville, CA 95667 • 530.644.4811 fax 530.644.4803

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

March 24, 2022

Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

RE: Support for Enhanced Air Quality Monitoring for Communities Grant

Dear Environmental Protection Agency,

I am writing on behalf of the South Coast Air Quality Management District (South Coast AQMD) staff in support of the City of Paramount's application for the Environmental Protection Agency (EPA) Enhanced Air Quality Monitoring for Communities. South Coast AQMD is the regulatory agency responsible for improving air quality in the vast majority of Southern California, including most of Los Angeles County, where Paramount is located.

South Coast AQMD supports individuals and communities in their goals to experience healthy living, prioritize community health, and constructively bring about enduring change on improving air quality. South Coast AQMD recognizes that Paramount's development consists of an industrial belt in the immediate vicinity of the community. After South Coast AQMD air monitors detected elevated levels of hexavalent chromium in 2016, Paramount was determined not to become another "statistic" of southeast Los Angeles County environmental injustice. The City of Paramount provided strong assistance to help reduce the harmful hexavalent chromium emissions from previously unknown sources. As a valued partner in the City's efforts, we look to the EPA's Enhanced Air Quality Monitoring for Communities grant as an important facilitator for the impacted Paramount community, and I can support the City's dedicated and dynamic air monitoring approach to provide an enhanced community environment.

The City of Paramount has taken unprecedented measures to ensure the quality of life is improved, and the grant is a deserving tool for the residents of this community.

I respectfully request your complete consideration of the Enhanced Air Quality Monitoring for Communities grant application, and I look forward to a favorable response.

Sincerely,

Jason C. Low

Jason C. Low, Ph.D.
Assistant Deputy Executive Officer
Science & Technology Advancement
Monitoring and Analysis Division

The City of Paramount seeks federal funding from the Enhanced Air Quality Monitoring for Communities grant from the Environmental Protection Agency (EPA) to continue to track the ambient air monitoring program for a two year period intended to measure and monitor possible community exposure to Hexavalent Chromium (Cr(VI)) and ensure metal related businesses who produce Cr(VI) emissions are not emitting pollutants at harmful levels (more than 0.06 nanograms).

Enhanced Air Quality Monitoring for Communities
City of Paramount Planning Department

EPA-OAR-OAQPS-22-01
Project Narrative
March 24, 2022

1) Project Description

The City of Paramount (City) Planning Department submits this application under the opportunity Enhanced Air Quality Monitoring for Communities to continue to track the ambient air monitoring program for a two year period intended to measure and monitor possible community exposure to Hexavalent Chromium (Cr(VI)) and ensure metal related businesses who produce Cr(VI) emissions are not emitting pollutants at harmful levels (more than 0.06 nanograms).

Paramount has a land area of 4.8 square miles. Of that area, a high concentration -- 23% of the land -- is designated for industry, and a small but rooted number of legal nonconforming residences are interspersed throughout as a legacy of land use approvals predating the 1957 incorporation of the City of Paramount. Additionally, Paramount is home to four large-scale metal forging companies (Carlton Forge Works, Mattco Forge, Press Forge, and Weber Metals) that provide product for commercial and military aviation contractors. The Long Beach Freeway (I-710), a primary truck route from the ports, runs immediately adjacent to the western boundary of Paramount, and diesel trucks traverse Paramount streets and are known to idle their engines, which creates smog-forming nitrogen oxide (NO_x) emissions.

Given the extremely high citywide population density of Paramount of 11,483 residents per square mile (2010 Census) in Paramount with closely intertwined industrial and residential areas, schools are sited adjacent to industry and classrooms, and thousands of students are exposed to the byproducts of manufacturing. As such, a distinct population is overburdened by air emissions.

In 2016, the City became the subject of a highly controversial press release by *The Los Angeles Times*. A reporter was asking for comments on the extremely high levels of hexavalent chromium found in the air within the town's industrial neighborhood. So began a turbulent time of confusion, anxiety, controversy, and, ultimately, concerted action. The South Coast Air Quality Management District (SCAQMD) had discovered the abnormal concentration of the toxic metal and sent out a press release. The City, however, was unaware of the situation at the time.

In response to address environmental and public health concerns, a stand-alone environmental website was built – paramountenvironment.org – delivering a convenient storehouse of data, articles, and links. The public can actively report any odor or complaint to notify SCAQMD that measures need to be taken place in order mitigate any concerns that the community members may have.

Funding for this enhanced air quality monitoring grant will enable the City to achieve five major outputs or outcomes:

1. Provide descriptions of the data collection and analysis efforts
2. Illustrate how monitoring equipment will be integrated, operate, maintain the monitoring equipment
3. Develop and implement study designs that include current and historic data

4. Define the Data Quality Objectives (DQOs) and illustrate how they will be met
5. Include all Standard Operating Procedures (SOPs) for the project

2) Project Goals, Outputs, and Outcomes

This project's goals, outputs, schedule, and outcomes are provided below in Table 1. Goals, Outputs, and Outcomes. More detailed descriptions of the outputs and outcomes for each goal, and how these outputs align with EPA priorities and City of Paramount's Planning Department's business and administrative needs are described below. The goals and outputs of this project support EPA's FY 2018-2022 Strategic Plan. Goal 3: Greater Certainty, Compliance, and Effectiveness, Objective 3.4: Streamline and Modernize, as well as Objective 3.3 Prioritize Robust Science. This project supports EPA Strategic Goad 3.4 for regulatory monitoring since the EPA requires that PM monitoring networks of this scope include routine collocated sampling at one of the sites. While it is realized that this monitoring is not regulatory, collect sampling will further define the quality of the date. Furthermore, the following environmental are also supported by this project:

1. The requested scope of work is to continue to track the ambient air monitoring program intended to measure and monitor possible community exposure to Hexavalent Chromium (Cr(VI)) and ensure metal-related businesses that produce Cr(VI) emissions are not emitting pollutants at harmful levels (more than 0.06 nanogrmas). Include all Standard Operating Procedures (SOPs) for the project
2. The monitoring program consists of the collection of integrated 24-hour samples every six days (1/6) at five (5) sites in the community approved by Paramount.

Goal One: Data Collection

This Goal, along with is associated outputs and outcomes, is consistent with EPA EN Grant Priority EPA-OAR-OAPS-22-01

Goal 1 Data Collection, Monitor Equipment:

1. Data Collection (November 2022-November 2024)
    1.1. Provide descriptions of the data collection and analysis efforts
    1.2. Illustrate how monitoring equipment will be integrated, operate, maintain the monitoring equipment

Goal Two: Implement study designs, data quality objectives, standard operating procedures

This Goal, along with is associated outputs and outcomes, is consistent with EPA EN Grant Priority EPA-OAR-OAPS-22-01

Goal 2 Implement study designs, data quality objectives, standard operating procedures:

2. Monitor Equipment (November 2022-November 2024)
    2.1. Develop and implement study designs that include current and historic data
    2.2. Define the Data Quality Objectives (DQOs) and illustrate how they will be met
    2.3. Include all Standard Operating Procedures (SOPs) for the project

Table 1. Goals, Outputs, and Outcomes

Goal	Output	Output Budget	Scheduled Completion Date	Outcome(s)
Goal 1: Data Collection, Monitor Equipment **Total Goal Budget: $291,966**	1.1 Provide descriptions of the data collection and analysis efforts	$161,346	November 2022-November 2024	1.1 Provide descriptions of the data collection and analysis efforts 1.2 Illustrate how monitoring equipment will be integrated, operate, maintain the monitoring equipment
	1.2 Illustrate how monitoring equipment will be integrated, operate, maintain the monitoring equipment	$130,620	November 2022-November 2024	
Goal 2 Implement study designs, data quality objectives, standard operating procedures **Total Goal Budget: $27,786**	2.1 Develop and implement study designs that include current and historic data	$18,280	November 2022-November 2024	2.1 Develop and implement study designs that include current and historic data 2.2 Define the Data Quality Objectives (DQOs) and illustrate how they will be met 2.3 Include all Standard Operating Procedures (SOPs) for the project
	2.2 Define the Data Quality Objectives (DQOs) and illustrate how they will be met	$7,616	November 2022-November 2024	
	2.3 Include all Standard Operating Procedures (SOPs) for the project	$1,890	November 2022-November 2024	

3) Roles, Responsibilities, and Qualification of Key Personnel & Any Project Partner(s)

Project Manager: David Bush, Principal, T&B Systems
David Bush will serve as the project manager for the duration of this grant project. He was selected for this role based on over 40 years in the meteorological and air pollution research field, specializing in the development and implementation of quality assurance (QA) programs and in the setup and operation of air quality monitoring efforts.

His project responsibilities include:
- Quality Assurance for Air Pollutio@n Measurement System
- Setup and operation of air quality monitoring efforts

Contact Person: Ivan Reyes, Associate Planner, City of Paramount Planning Department
Ivan Reyes will serve as the contact person for the duration of this grant person. He was selected for the role based on four years of public sector experience, specifically in municipal planning dealing with projects related to California Environmental Quality Act (CEQA) compliance.

His project responsibilities include:
- Liaison between City, T&B Systems and EPA grant

4) Programmatic Involvement and Mentor Support

This project will include substantive programmatic involvement from T&B Systems. The contribution will include design and implement an ambient air monitoring program intended to measure and monitor possible community exposure to address Hexavalent Chromium (Cr(VI)) levels and ensure metal related businesses who produce Cr(VI) emissions are not emitting pollutants at harmful levels. The monitoring program will consist of the collection of integrated 24-hour samples every six days (1/6) at five (5) sites in the community approved by Paramount. The cost estimate provided is for a similar meteorological station configuration as the stations SCAQMD were operating over the past few years in Paramount. This air monitoring program effort is proposed for a minimum of one year with the option of extension beyond the one year if additional funding is provided.

Key Programmatic Participants:
Project Manager: David Bush, Principal, T&B Systems
David Bush will serve as the project manager for the duration of this grant project. He was selected for this role based on over 40 years in the meteorological and air pollution research field, specializing in the development and implementation of quality assurance (QA) programs and in the setup and operation of air quality monitoring efforts.

His project responsibilities include:
- Quality Assurance for Air Pollution Measurement System
- Setup and operation of air quality monitoring efforts

The project will not utilize a mentor.

5) Commitment to Reuse

The City of Paramount Planning Department has no products identified for reuse in this project. As City Council is aware of the air monitoring services, up until December 2020 the South Coast Air Quality Management District (SCAQMD) has been conducting air monitoring at numerous locations throughout the City. This monitoring began in 2016, and excessive levels of hexavalent chromium were recorded in two industrial locations in the City. The SCAQMD ceased air monitoring last December 2020 due to COVID-19. In mid-July of 2021, the SCAQMD resumed air monitoring at a reduced level of the five locations in the City. The SCAQMD utilizes monitors that were purchased by the City and takes samples once every six days. Air Monitoring by the SCAQMD officially ended in September of 2021. On behalf of the City, T&B Systems has been awarded a contract for continuing to track the air monitoring services. Since this is City owned equipment, the intention is to keep the air monitoring fully functioning provide that there is enough funds from grants or part of the City's budget.

This project does not include the use of a shared service. The City of Paramount also commits to register any reuse of existing EN tools, as well as register any new tools as developed during th execution of this grant project.

6) Technical Understanding

In order to accomplish the goals and outputs as outlined in this project, the City of Paramount will be utilizing the following technological solutions:

- BGI PQ167R air sampler for metals analysis
  - The BGI PQ100 is an "intelligent Air Pump" that can monitor its own airflow rate and thereby adjust the pump speed to compensate for changes in load pressure and/or other forces which would otherwise hamper the flow of air through a filter (or sample collector). The PQ100 unit can be programmed to begin its sampling job at a specific date, time, and stop sampling after the user defined run time is depleted. However, the sampling time should always be 24 hours for Cr+6 sampling the Toxics inn Schools Study.
- PQ100 Sampling System
  - Designed to operate from 1 standard liter per minute (1000 cc per minute) to 25.0 standard liters per minute and is unaffected by changes in ambient temperature and barometric pressure. The slow rate precision is guaranteed to 2% of the calibration set point.

The solutions as identified above are appropriate for the project because these air monitoring systems will track the ambient air monitoring program intended to measure and monitor possible community exposure to Hexavalent Chromium (Cr(VI)) and ensure metal related businesses who produce Cr(VI) emissions are not emitting pollutants at harmful levels (more than 0.06 nanograms). The City of Paramount is confident in its ability ti implement and maintain this technology because it has awarded a contract to T&B Systems, an innovative environmental and meteorological monitoring and research company that has been in the air quality and meteorological research field for over 35 years. T&B Systems has provided extensive services in station installations, operations, audits, maintenance and date processing for gaseous, PM and meteorological measurements, data telemetry, and data management.

7) Overview of Project Budget

The total budget for this project is $319,754. There is $0 in direct grants funding or in in-kind support. This project is a partnership project. The total budget are funds for project partners.

The proposed project budget also includes $0 for in-house costs and $18,280 budgeted for contractual costs. Contractor services have been procured for website fee (monthly) and shipping to and from Chester LabNet, 1/6 days sampling.

This project is not charging indirect costs. This ICR is not applicable. This project is requesting a total of $1,700 and a total of $128,920 in supplies.

This project is requesting a total of $7,616 in travel costs. These costs were determined by a fee study from T&B Systems and include the following:

- Five locations of air monitoring in the city of Paramount: City Hall: 16400 Colorado Avenue, Press Forge Works: 7700 Jackson Street, Aerocraft Heat Treating Co.: 15701 Minnesota Avenue, Wesley Gaines Elementary School: 7340 Jackson Street, Lincoln Elementary School: 15324 California Avenue.
- Traveler:
    - Kenneth Underwood (Program Manager): $1,400
    - David Yoho (Scientist III): $2,192
    - Randall Baxter (Senior Technician): $3,008

Goal One:
The budget provided for **Goal 1 Data Collection, Monitor Equipment** is appropriate for the project because it aligns with the cost estimates provided by EPA in the budget detail.

Goal 1: Output 1.1: $161,346
Output 1.2: $130,620
Total: $291,966

Goal Two:
The budget provided for **Goal 2 Implement study designs, data quality objectives, standard operating procedures** is appropriate for the project because it aligns with the cost estimates provided by EPA in the budget detail.

Goal 2: Output 2.1: $$18,280
Output 2.2: $7,616
Output 2.3: $1,890
Total: $27,786

8) Past Performance

The City if Paramount Planning Department has been awarded no Exchange Network assistant agreements since 2002, resulting in no products registered in RCS/ENDS/SSRC/ since 2011.

The City of Paramount Planning Department has no non-EN EPA assistance agreements since 2017.

Manifest for Grant Application # GRANT13580523

Grant Application XML file (total 1):

1. GrantApplication.xml. (size 35141 bytes)

Forms Included in Zip File(total 6):

1. Form ProjectNarrativeAttachments_1_2-V1.2.pdf (size 16011 bytes)

2. Form SF424_3_0-V3.0.pdf (size 24002 bytes)

3. Form SF424A-V1.0.pdf (size 23802 bytes)

4. Form EPA4700_4_3_0-V3.0.pdf (size 22742 bytes)

5. Form OtherNarrativeAttachments_1_2-V1.2.pdf (size 15907 bytes)

6. Form EPA_KeyContacts_2_0-V2.0.pdf (size 37242 bytes)

Attachments Included in Zip File (total 8):

1. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1241-Project Narrativev2.pdf application/pdf (size 126065 bytes)

2. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1239-03-24-22 LOS_Paramount City_EPA Grant.final.pdf application/pdf (size 181755 bytes)

3. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1238-TB Systems resumes.pdf application/pdf (size 199102 bytes)

4. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1237-Ivan Reyes, resume.pdf application/pdf (size 42720 bytes)

5. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1236-T and B Systems_Air Monitoring Services. agreement2.pdf application/pdf (size 113361 bytes)

6. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1235-Agreement-City of Paramount.pdf application/pdf (size 647211 bytes)

7. SF424_3_0 SF424_3_0-AdditionalProjectTitle-1240-descriptive title.pdf application/pdf (size 206199 bytes)

8. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1234-Mandatory attachment- ParamountCityGrant.pdf application/pdf (size 691169 bytes)

RESUME: DAVID H. BUSH
PRINCIPAL

Educational Background

B.S., Atmospheric Science, University of California, Davis, 1980
EPA Training Program, U.C. Davis, 1979-80
EPA Air Pollution Training Institute course, Quality Assurance for Air Pollution Measurement Systems, 1980

Mr. Bush is the owner of T&B Systems, and has spent over 40 years in the meteorological and air pollution research field, specializing in the development and implementation of quality assurance (QA) programs and in the setup and operation of air quality monitoring efforts. Since 1980, he has performed external and internal system and performance audits for air quality and meteorological measurements, laboratories, and data processing operations. In addition, he has developed QA auditing procedures, and managed QA contracts. He has performed over 500 air quality monitoring system and performance audits and was instrumental in developing new audit procedures, particularly in the auditing of particulate matter and meteorological monitoring systems. In addition, he has led several monitoring efforts, specializing in meteorological and particulate monitoring. He is the contract manager for a large bio- surveillance monitoring network in the Bay Area, providing daily samples from over 30 locations. From 1993 to 2015, he managed efforts funded by the California Air Resources Board monitoring ozone and wind data at multiple levels on a 2000-ft transmission tower near Sacramento. In 2008, Mr. Bush was also responsible for conducting aircraft measurements of ozone and $PM_{2.5}$ in Wyoming and Las Vegas, and for performing descriptive analyses of these and other data sets. In 2011, using his experience gained on the Sacramento transmission tower, he conducted long-line monitoring of wintertime boundary layer ozone and VOCs using a tethered balloon and a communications tower in Wyoming. In 2009, he setup and operated a Photochemical Assessment Monitoring Station (PAMS) for three years in northern California. In addition to conventional criteria pollutants, the effort included measurement of VOCs using a continuous gas chromatograph.

Mr. Bush also extensive experience with the small and inexpensive sensors that are changing the way air quality is being measured. In 2018, he headed the development of a sampling package for Kansas State University for use on UAVs flying into controlled-burn smoke plumes to measure 1-second ozone and $PM_{2.5}$ concentrations, temperature, and RH, all as a function of GPS position, as well as obtain gas and particulate samples for later analysis. He also assisted in the construction of a portable sample package for the Environmental Defense Fund for sampling similar 1-second data, plus black carbon concentrations. The package was designed to be used by city personnel on fleet vehicles during routine driving. Two packages successfully operated in Huston on a daily basis during June, July and August 2018. Mr. Bush also validated the data collected during this pilot study. Mr. Bush is a team member for a recently awarded Bay Area AQMD contract to develop a Sensor Center providing Bay Area communities with knowledge and guidance for using inexpensive sensors to accurately monitor local air quality issues.

Mr. Bush has been involved in a quality assurance (QA) role in several West Coast field data collection activities in the 1990s. He was the QA Manager for the California Regional $PM_{10}/PM_{2.5}$ Air Quality Study (CRPAQS), which included major field activities from late 1999 through early 2001. His responsibilities included overall management of the study's QA team, preparing guidance documentation for the monitoring contractors, developing audit protocols, identifying audit resources, and scheduling audit activities. In a similar role, he was also the QA manager for the Central California Ozone Study (CCOS) QA program. This was a major addition to CRPAQS designed to provide a detailed investigation of the formation and transport of ozone in California's Central Valley. In1987, he became the manager of a large on-site technical support contract for the Santa Barbara County Air Pollution Control District, managing the QA contract and conducting QA support. For his first 5-years with this contract, he was principally responsible for providing data validation and data management for the District's 20 station PSD air quality monitoring network. In addition, he and his staff provided system and performance audits, and review of monitoring and quality assurance plans. Support is still being provided to the District through a T&B Systems contract managed by Mr. Bush, mostly in the form of audits of the meteorological and air quality stations.

Mr. Bush has been actively involved in recent measurement programs designed to study the effects of air pollution on human health. He was the QA Manager for the Fresno Asthmatic Children's Environment Study (FACES). This was a multi-year health effects study that included both the collection of air quality and health-related data. For eight years, he was the QA Manager providing external quality assurance for the University of Southern California Children's Health Study. All of the above studies involved collection of a wide range of data, including region-wide particulate and gaseous air quality data, lung function testing data, and health surveys. He also provides or has provided external quality assurance review of 18 epidemiological studies sponsored by the Health Effects Institute. These studies are investigating the effect that air pollution has on human health, particularly for children, asthmatics, and the elderly. Mr. Bush's audits have expanded to include an international emphasis. He has conducted Health Effects Institute audits in the United Kingdom, Greece, Germany, the Netherlands, China, Taiwan, Mexico, and Canada, and for 4-years conducted annual audits of a multi-station monitoring network in the Andes in Peru.

Memberships

Air & Waste Management Association, American Meteorological Society

RESUME: KENNETH H. UNDERWOOD, PH.D.
SENIOR SCIENTIST

Professional Certifications
Certified Consulting Meteorologist (CCM #466), American Meteorological Society

Educational Background
Ph.D., Meteorology, Pennsylvania State University, 1981
M.S., Meteorology, Pennsylvania State University, 1978
B.Sc., Physics and Mathematics, Bowling Green State University, 1971

Dr. Underwood has over 30 years of experience as a product developer and consultant to the environmental and meteorological communities. Dr. Underwood is trained as a boundary layer meteorologist with a heavy emphasis on using ground base remote sensing technologies to investigate and monitor the critical atmospheric parameters for environmental monitoring and research studies. For 25 years, Dr. Underwood worked to implement and improve Doppler/SoDAR (Sonic Detection and Ranging) technology while considering that its primary application is the measurement of the local atmospheric mixing height as well as the local atmospheric wind and turbulence profiles. The applications for this technology are environmental monitoring, meteorological studies, wind resource assessment and monitoring, aircraft safety and any requirement to understand the 3D spatial and temporal evolution of the atmospheric boundary layer.

Dr. Underwood has designed, developed and utilized several Doppler/SoDAR systems including hardware and software for measuring wind and turbulence profiles within the atmospheric surface and boundary layer (surface to 2000 meters), developed FAA sponsored wake vortex measurement studies at several US airports using SoDAR (wind and turbulence) and Radiometer (temperature and humidity profiles), contributed his expertise to the NASA SonicBat program to quantify the interaction of sonic booms with atmospheric turbulence in convective conditions, designed atmospheric monitoring program designed to quantify the propagation of ultra-high frequency radio waves through cloud entrained liquid water drops and ice crystals for FB Technologies and the development of standard operating procedures (SOPs) as guidance for the EPA scheduled utilization of laser based ceilometer instruments to measure local mixing heights measurements for recent deployment of Photochemical Assessment Monitoring Stations (PAMS).

Dr. Underwood has designed over 30 power and communication autonomous field measurement systems that have been deployed throughout the world. Many of these systems continue to be in operation. These systems use a combination of solar, wind and generator power that have enabled operation for multiple years in some cases. They have utilized satellite, cellular and radio communication that were selected according the customer requirements.

From 1992 through 2001, Dr. Underwood served as Vice President for AeroVironment, Inc. managing its Products and Air Quality divisions. Concurrent with that responsibility, Dr. Underwood provide meteorological forecasting and planning support the AeroVironment solar powered plane (Helios) that set the altitude record of 29,410 meters that was designed as an alternative communications platform to satellite based platforms. Dr. Underwood introduced the SoDAR technology for ground-based wind measurements for wind resource assessment needed for wind energy investment development programs. Dr. Underwood purchased the SoDAR technology from AeroVironment, Inc. and created Atmospheric Systems Corporation (ASC) to design and manufacture SoDAR related technology from 2005 until 2016 when the technology was sold. Dr. Underwood has actively worked with T&B Systems since ASC was sold in 2016.

Dr. Underwood teaches Introductory Physical Sciences Laboratory (PSCI-101) and the Earth's Weather and Climate (GEOG-102) at Antelope Valley College (AVC). At the request of the AVC Air Frame Manufacturing Technology 4-year degree program, he developed an upper level, quantitative non-calculus meteorology course. It is listed as PSCI 302 Introduction to Quantitative Atmospheric Dynamics and Thermodynamics. He participated in the Meteorology B event for the AVC hosted Los Angeles Regional Science Olympiad.

Memberships
American Meteorological Society
American Society for Testing and Materials (ASTM)

RESUME: DAVID L. YOHO
SCIENTIST III

Educational Background
B.A., Environmental Geography, California State University, Northridge, 1998

Training Background
Hydrolynx Training Certificate, Hydrolynx ALERT Systems Training Class, 1999
ASOS Weather Observing Certificate, Van Nuys Airport, National Weather Service, 1998-2000

Mr. Yoho has 18 years of experience in the air pollution and meteorological research field. He is currently a scientist for T&B Systems and is responsible for conducting quality assurance (QA) audits of air quality and meteorological monitoring sites and assisting in air quality measurement programs. His QA activities include 18 years of ongoing QA support of the Santa Barbara County APCD conducting the air quality and meteorological performance audits of eight monitoring stations. In addition, he has been supplying routine QA support to several Paiute tribes in eastern California and western Nevada since 2010, including annual audits and QA/QC training. Between 2008 and 2014, Mr. Yoho was the primary auditor for the State of Wyoming Department of Environmental Quality SLAMS/SPM networks, which included quarterly gaseous and meteorological audits. Between 2001 and 2014, Mr. Yoho provided QA support of the South Coast Air Quality Management District's (AQMD) sixty-three site network, which included audits of High Volume FRM PM_{10}, TSP, FRM $PM_{2.5}$, and $PM_{2.5}$ SASS air quality monitoring samplers. In addition, Mr. Yoho was responsible for performing audits of the AQMD PAMS upper air and surface meteorological network. In 2004, Mr. Yoho assisted in audits of gaseous analyzers and particulate samplers in Peru. Between 2003 and 2016, Mr. Yoho managed and performed the audits for a PSD air quality and meteorological monitoring station for Rocky Mountain Steel Mills. He has also provided QA support for the Fresno Asthmatic Children's Environment Study (FACES) and Children's Health Study (CHS) programs where he conducted audits of mobile and fixed air quality monitoring instrumentation for a program evaluating the effects of air pollution on children's health. Mr. Yoho has also provided QA support of the Great Basin Unified Air Pollution Control District (GBUAPCD) radar wind profiler and surface meteorological site in the Owens Valley. As part of the GBUAPCD contract and AQMD upper air QA contract, Mr. Yoho was responsible in the preparation and release of rawinsondes. Mr. Yoho was also an auditor for the California Regional $PM_{10}/PM_{2.5}$ Air Quality Study (CRPAQS) and the Central California Ozone Study (CCOS). He conducted audits of surface and upper air monitoring systems for both studies, and conducted audits of particulate matter monitoring equipment for CRPAQS.

In addition to his QA experience, Mr. Yoho has assisted in several air quality measurement programs as well as operated and maintained several meteorological monitoring sites. In 2018, Mr. Yoho was in charge of designing and integrating two small mobile sensor packages for an Environmental Defense Fund (EDF) pilot study to track local air quality issues within disadvantaged communities. In 2017, Mr. Yoho managed a field saturation monitoring program and assisted with the installation and operations of twelve portable PM2.5 monitors and two meteorological stations in North Pole, AK. Additionally, in 2017 and 2018, Mr. Yoho was involved in PM10/TSP and meteorological fenceline studies in Seattle, WA and in Long Beach, CA using low-cost PM sensors. In 2017, he provided atmospheric measurement design, support and data analysis for the NASA SonicBat campaign at Kennedy Space Center, Florida. Since 2004, Mr. Yoho has been working with several Paiute Tribes to address air and water monitoring related issues to better understand their impacts on the local communities. Other recent monitoring work includes the installation, maintenance and calibration of the four meteorological stations and five portable PM10 samplers at Oceano Dunes State Vehicular Recreation Area and ozonesonde/rawinsonde observations as part of the South Coast Air Quality Management District (SCAQMD) Boundary Study, and measurements of ambient lead from airport operations. In 2015, Mr. Yoho installed 40 meteorological stations in the Midwest including a Parsivel and Micro Rain Radar. Mr. Yoho supported the operations of an air quality and meteorology PSD monitoring program in Kauai, Hawaii, which includes a fully instrumented 10-meter meteorological tower, a mini-SODAR, and a full spectrum of air quality measurements. He was the aircraft operator for ozone and precursor sampling programs in Nevada and Wyoming in 2007 and 2008, and has been actively involved in the instrument design and fabrication for large PM10 and Ozone saturation studies conducted in Las Vegas in the spring and summer of 2005. Beginning in 2004, Mr. Yoho was responsible for conducting routine calibrations, internal audits and maintenance of a meteorological network located in the Coachella Valley as part of a meteorological support contract with the AQMD. Mr. Yoho was the station operator for a PSD meteorological monitoring station in Ventura County. He helped integrate and install the system and provided routine data polling, calibration support and processing and validation of the collected data. The station uses the most current technology for the measurement of meteorological variables and implements the Solar Radiation Delta Temperature (SRDT) measurement technique for the determination of atmospheric stability. For the CRPAQS program, in addition to his QA duties, he operated a multi-site network in the desert southwest for the measurement of visibility. For a large carbon monoxide saturation study in Las Vegas, he helped design and then fabricate instrumentation for the collection of CO data at more than 60 monitoring stations. For the same study he integrated and operated sampling equipment in a van for mobile measurements and mapping of CO during the 2001/2002 wintertime saturation study.

RESUME: DENNIS K. MIKEL
SENIOR SCIENTIST

Educational Background

M.S., Atmospheric Science, North Carolina State University, Raleigh, 2015
B.S., Biochemistry, California Polytechnic State University, San Luis Obispo, 1981

Mr. Mikel recently joined T&B Systems as a Senior Scientist with 34 years of experience in air quality monitoring and data analysis. From 2000 to 2018, he served as a Physical Scientist for the US Environmental Protection Agency (EPA), Office of Air Quality Planning and Standards (OAQPS) in Research Triangle Park (RTP), North Carolina. He was a national technical lead on emission and ambient monitoring of air toxics, fugitive dust, Greenhouse Gases, asbestos, meteorology, quality assurance (QA) and ultrafine particles. He also worked in the Ambient Air Measurement (AAMG) and Measurement Technology Group (MTG). Key experience included:

- In 2011, he served as the Greenhouse Gas Reporting Rule Measurement Team Lead, coordinating the review of test reports and associated data, and heading meetings with stakeholders.
- In 2010, he was the lead in a project with the Center for the Study of Open-Source Emissions to review and assist in the submittal of several Other Test Methods (OTMs). In this capacity, he reviewed and commented on the proposed methods.
- Beginning in 2008, he led an effort researching the measurement methodologies of Ultrafine Particles/Nanoparticles (UFPs/ NPs), which are not currently regulated by the EPA. To understand the breadth of the measurement issues, he organized a 2-day workshop on the RTP campus that brought experts from around the country to discuss the measurement issues, and generated a white paper that summarized the findings. In 2011, he was co-lead on a project to create a compendium to describe the techniques and instrumentation that currently can measure UFPs/NPs.
- In 2007, while working for MTG, he served a one-year rotation as the National Ambient Air Quality Assurance Lead, with the primary responsibility or implementing the National QA system. He supervised a team of five people who met bi-weekly to discuss the QA aspects of the ambient air data and its placement into the Air Quality System (AQS).
- For 13 years, he was the National Air Toxics Trends Quality Assurance Lead. His duties included creating a comprehensive QA program for the National Air Toxics Trends Stations (NATTS) program and overseeing the implementation of QA across monitoring stations and laboratories. In this role, he created a national laboratory Proficiency Testing (PT) system and instituted a national Technical System Audit (TSA) program.
- In 2007-2008, he was the team lead for re-writing the April 2008 revision of EPA's QA Handbook – Volume IV: Meteorological Monitoring. This included working with a variety of EPA, State and Local staff and contractors to re-write this EPA Handbook.
- In 2009, he was assigned as the QA Lead for the National School Air Toxics (SAT) program. As such, he was part of SAT management team and met with the group. His responsibility included creating an approved QA Project Plan (QAPP) and overseeing the collection of the data and their subsequent QA review and analysis.

From 1998 to 2000, Mr. Mikel was an Environmental Scientist for Region 4 of the US EPA in Atlanta, Georgia, working directly with the State and Local air pollution agencies. His duties included communicating technical information to the State and Local agencies in Region 4, reviewing Quality Assurance Project Plans (QAPPs) and serving as a grant coordinator for the State of North Carolina monitoring agencies. For several months, he was also the QA manager for two national programs: Air Toxics and PM Supersites. In 1999, he was the QA manager for the Atlanta Supersite, where he coordinated the Performance and Technical Systems Audits for the Supersite, promoted quality assurance/quality control principles, and reviewed QAPPs. As the National Air Toxics QA lead, he worked directly with the EPA Air Quality Assessment Division (AQAD) staff to implement the National Air Toxics Pilot Program, and was responsible to create the pilot QAPP and advise the AQAD staff on QA matters.

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Prior to his work with the EPA, Mr. Mikel was a Field Supervisor for the Ventura County Air Pollution Control District, where he was responsible for operation of all ambient monitoring equipment. He was also a QA officer during the Southern California Ozone Study -1997, participating in several workgroups that coordinated study. In 1996-1997, he participated in the re-issuing of the EPA Quality Assurance Handbook – Volume I, writing several sections in the 1998 revision. He also worked for AeroVironment, Inc. from 1987 to 1993 as a Program Manager/Field Auditor in a large support contract for the Santa Barbara Air Pollution Control District. In this role, he was responsible for all work, projects and activities, including supervision of a team of 6 professionals, client contact, and billing. He coordinated the QA review of ambient and meteorological data for the APCD, acquiring extensive experience in reporting, validating and verifying ambient air quality and meteorological data. As a field auditor, he performed quality assurance audits on ambient and meteorological equipment. He also provided support for a QA team in performing audits and assessments for several large-scale research projects, including the San Joaquin Valley Ozone Study, The Lake Michigan Ozone Study, and the National Parks Service Monitoring Network.

RESUME: RANDALL W. BAXTER
SENIOR TECHNICIAN

Educational Background
B.A., Apparel Production, California State Polytechnic University, Pomona, 2004
AIMS Data Systems Certified Teacher, AIMS360 Los Angeles California, 2005
Quickbooks entry-level bookkeeping, Los Angeles City College, 2007
Great Basin Unified APCD Quality Assurance Workshop 2012

Mr. Baxter is an associate scientist at T&B Systems. Since joining in early 2012, his work has focused on instrument integration, calibration, monitoring and database ingest and displays. He also supports the maintenance and certification of the calibration standards in the Valencia office and developed the T&B Systems calibration chamber used for certifying relative humidity probes.

Mr. Baxter is the principal technician in charge of on-going particulate and meteorological measurements being conducted at the Oceano Dunes State Vehicle Recreation Area. (ODSVRA) near San Luis Obispo, CA. Mr. Baxter is responsible for setting up the monitoring network's equipment for monitoring during the park's summertime dust season. From 2016 through 2018, the network consisted of five Met One E-BAM samplers, each with collocated meteorological measurements. Beginning in 2019, the network was redesigned to consist of fifteen Met One Particle Profiles, once again all with collocated meteorological measurements. In both cases, the sample systems were portable and solar powered, to allow for the movement of monitoring locations in order to meet study goals. Mr. Baxter is responsible for the routine maintenance of all network monitoring equipment, providing biweekly maintenance of the network particulate monitors, as well as quarterly maintenance ODSVRA's fixed meteorological tower. He was the primary technician in the effort to remove, refurbish and recalibrate the ODSVRA E-BAM network of samplers, including the meteorological monitoring equipment, before taking operation of the network in 2016.

Mr. Baxter is responsible for providing support to the South Coast Air Quality Management District (SCAQMD) in two roles; first, he provides primary calibration and maintenance support to the Photochemical Air Monitoring Station surface meteorological systems and second, is providing primary support in the upgrades and calibrations of the SCAQMD meteorological systems, with nearly 20 stations upgraded to date. In 2015 he provided the integration, calibration, and installation support to a network of over 50 agricultural meteorological stations in the Midwest with real-time remote access to all stations and ingest of data for displays of weather-related phenomena. In 2014 he provided field operations support to the Fugitive Dust Coal Train Study in preparation, deployment, sample collection and data processing to document the emissions from coal transportation by rail. For the Clark County Department of Air Quality Mr. Baxter provides the routine maintenance of the upper air measurement system at North Las Vegas Airport consisting of a radar wind profiler and microwave radiometer.

Prior to joining T&B Systems, Mr. Baxter worked in designing data display and quality assurance systems for apparel manufacturers in the Los Angeles area. Mr. Baxter worked 7 years as an employee of Apparel Information Management Systems (AIMS360) as the director of training and development with implementation of data displays and online retailing systems for each client. This included a quality assurance audit on each client to ensure the manufacturing data were consistent with the sales data. This experience with data management and quality assurance has been utilized on a number of T&B Systems projects.

Environmental Protection Agency (EPA) Enhanced Air Quality Monitoring for Communities
Request for Application EPA-OAR-OAQPS-22-01

Project Title: The requested scope of work is to continue to track the ambient air monitoring program intended to measure and monitor possible community exposure to Hexavalent Chromium (Cr(VI)) and ensure metal-related businesses that produce Cr(VI) emissions are not emitting pollutants at harmful levels in the City of Paramount.

Applicant Information:

- City of Paramount, Planning Department
- 16400 Colorado Avenue, Paramount, CA 90723
- Ivan Reyes, Associate Planner, 562-220-2060, ireyes@paramountcity.com
- DUNS #: 0049476020000

Set-Aside: No set-aside

Brief Description of Applicant Organization: The City of Paramount is a small city despite "disadvantaged" by the State of California - in the heart of Southeast Los Angeles County. The City is located in the proximity of four major freeways and dozens of industrial sites. The city is densely populated with more than 11,483 (2010 Census) people per square mile. More than half the current housing stock was built before 1970, and housing costs account for an average of 36.8 percent of total household income for most renters. Like many cities in the Gateway Cities region, Paramount's current land use patterns are the product of a legacy of mid-century County planning during a time when the area was open agricultural land mixed with scant residential development

Project Partner(s):

- T&B Systems
- David Bush, Principal

Project Location: City of Paramount, air monitoring system locations:

- City Hall: 16400 Colorado Avenue, Paramount, CA 90723
- Press Forge: 7700 Jackson Street, Paramount, CA 90723
- Aerocraft Heat Treating Co.: 15701 Minnesota Avenue, Paramount, CA 90723
- Wesley Gaines Elementary School: 7340 Jackson Street, Paramount, CA 90723
- Lincoln Elementary School: 15324 California Avenue, Paramount, CA 90723

Air Pollutant Scope: Hexavalent Chromium (Cr(VI))

Budget Summary:

EPA Funding Requested	Total Project Cost
$319,754	$319,754

Project Period:

- Starting November 1, 2022 and ending November 1, 2024

Short Project Description: The City of Paramount seeks federal funding from the Enhanced Air Quality Monitoring for Communities grant from the Environmental Protection Agency (EPA) to continue to track the ambient air monitoring program for a two year period intended to measure and monitor possible community exposure to Hexavalent Chromium (Cr(VI)) and ensure metal

related businesses who produce Cr(VI) emissions are not emitting pollutants at harmful levels (more than 0.06 nanograms).

Section 1 – Project Summary and Approach

Overall Project

The requested scope of work is to continue to track the ambient air monitoring program intended to measure and monitor possible community exposure to Hexavalent Chromium (Cr(VI)) and ensure metal-related businesses that produce Cr(VI) emissions are not emitting pollutants at harmful levels (more than 0.06 nanogrmas). The monitoring program consists of the collection of integrated 24-hour samples every six days (1/6) at five (5) sites in the community approved by Paramount. The five samplers for the collection of Cr(VI) samples that are used for the monitoring effort, consists of either the following: BGI PQ 100 Sampler and BGI Omni Ambient Sampler. In addition, the project including the procurement of a meteorological station that will be sited by Paramount. The meteorological station configuration is similar to the stations the South Coast Air Quality Management District (SCAQMD) was operating over the past few years in Paramount. This air monitoring program effort is proposed for a minimum of one year with the option of extension beyond the one year. We are requesting to continue the air monitoring service for an additional two years.

Key to meeting the monitoring goals will be a strong quality control program. The routine 6-day visits to the sites will include visual site inspections, diagnosis and repair of equipment problems, verification of sampler clock accuracy and sample runtimes, replacement of sensors (if necessary), routine operational maintenance of monitoring equipment, and documentation and reporting of all problems and resolutions to project management. As part of this effort, flowrates of the samplers will be checked with a transfer standard that is certified annually. Chain of custody forms will be filled out during each of the 6-day visits and sent to Chester LabNet (CLN). Careful filter handling practices will be implemented including the use of laboratory gloves when handling, removing, or installing the filter media.

In the approved Fiscal Year 2022 budget, the City Council approved $100,000 for air monitoring services. With the City Council awarding the contract for air monitoring services to T&B Systems, we anticipate spending $124,033 through the end of Fiscal Year 2022. At this time, we are asking for an additional appropriation of $24,033 to take us through the end of Fiscal Year 2022, and in Fiscal Year 2023 we will budget the remaining $41,344. In total, the City Council awarded the contract for air monitoring services in the amount of $165,377.

Project Significance

Paramount has a land area of 4.8 square miles. Of that area, a high concentration -- 23% of the land -- is designated for industry, and a small but rooted number of legal nonconforming residences are interspersed throughout as a legacy of land use approvals predating the 1957 incorporation of the City of Paramount. Additionally, Paramount is home to four large-scale metal forging companies (Carlton Forge Works, Mattco Forge, Press Forge, and Weber Metals) that provide product for commercial and military aviation contractors. The Long Beach Freeway (I-710), a primary truck route from the ports, runs immediately adjacent to the western boundary of Paramount, and diesel trucks traverse Paramount streets and are known to idle their engines, which creates smog-forming nitrogen oxide (NO_x) emissions. Given the extremely high citywide population density of Paramount of 11,483 residents per square mile (2010 Census) in Paramount with closely intertwined industrial and residential areas, schools are sited adjacent to industry and

classrooms, and thousands of students are exposed to the byproducts of manufacturing. As such, a distinct population is overburdened by air emissions.

In 2016, the City of Paramount became the subject of a highly controversial press release by *The Los Angeles Times.* A reporter was asking for comments on the extremely high levels of hexavalent chromium found in the air within the town's industrial neighborhood. So began a turbulent time of confusion, anxiety, controversy, and, ultimately, concerted action. The South Coast Air Quality Management District (SCAQMD) had discovered the abnormal concentration of the toxic metal and sent out a press release. The City, however, was unaware of the situation at the time.

In response to address environmental and public health concerns, a stand-alone environmental website was built – paramountenvironment.org – delivering a convenient storehouse of data, articles, and links. The public can actively report any odor or complaint to notify SCAQMD that measures need to be taken place in order mitigate any concerns that the community members may have.

Section 2 – Community Involvement

Community Partnerships

The South Coast Air Quality Management District (SCAQMD) previously worked in Paramount with Carlton Forge Works investigation into the elevated levels of metals in the air and the broader Community Air Toxics Initiative/Paramount Investigation. Paramount has recent experience with the development and implementation of community plans, such as the Paramount/South Gate Station Area Plan, the Bellflower-Paramount Bicycle Master Plan, the Bellflower-Paramount Active Transportation Plan, and the Paramount-Bellflower Plan to Prevent and Combat Homelessness, of which included substantial outreach and community buy-in. We would also like to point to the Paramount Air Quality Subcommittee engaged a wide spectrum of the residential, business, school, and faith-based communities that met the goal of establishing City actions that have since been implemented.

Community Engagement

To engage the community, City Council Air Quality Sub Committee was formed, a public working group made up of elected officials, residents, school district representatives, and City staff that met monthly for a year. The Committee's efforts resulted in a significant and comprehensive reevaluation of the municipal zoning code for the industrial area, an exhaustive undertaking to ensure future environmental protections.

At the direction of the City Council, the City of Paramount has assembled this information portal to ensure transparency and facts are available to the Paramount community about environmental concerns and questions. The issues affecting environmental quality in our community are complicated, and the City believes that creating a single purpose portal to address the questions and concerns of residents would be helpful. For complete transparency, a stand-alone environmental website was built – paramountenvironment.org – delivering a convenient storehouse of data, articles, and links.

For long-term air monitoring, $50,000 was allocated to purchase the City's own air samplers, to be placed and analyzed by AQMD.

Along with State and County health officials, soil testing was performed in underdeserved neighborhoods close to the industrial sites, and the City accelerated the testing of its water beyond State and Federal requirements to assure residents that the supply was clean and safe.

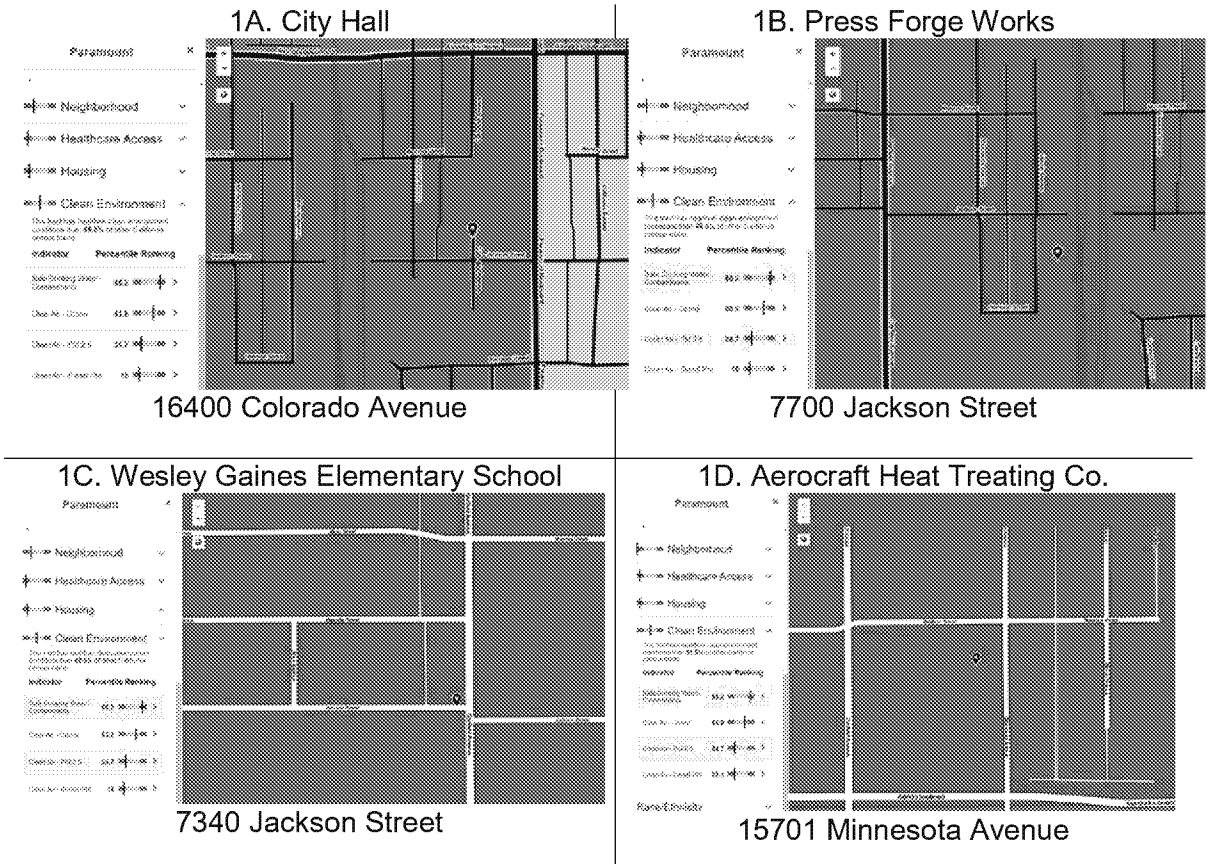
In the case of Paramount, existing ambient air monitoring by the AQMD has been successful at identifying sources and levels of hexavalent chromium and multipronged efforts to reduce and control such emissions have proven successful overall. However, earlier in 2019, elevated levels of hexavalent chromium were detected again in the Paramount Central Industrial District, and additional efforts are needed.

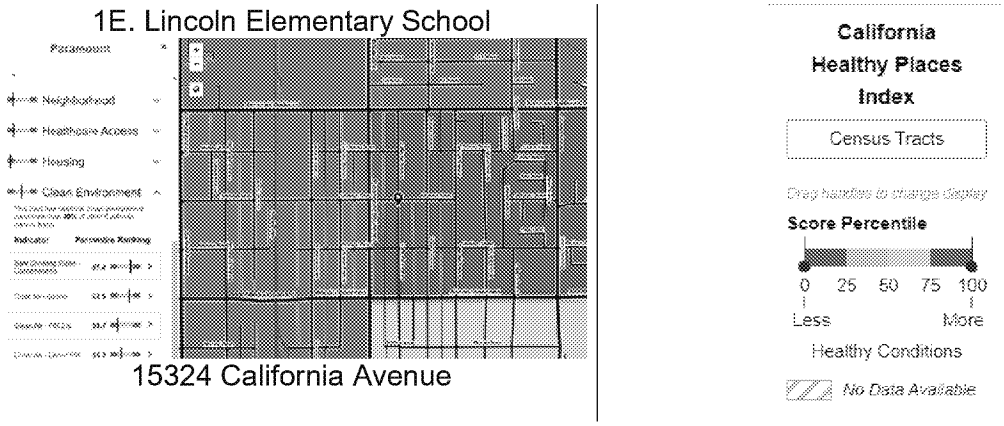
Section 3 – Environmental Justice

The City of Paramount is a small city despite "disadvantaged" by the State of California - in the heart of Southeast Los Angeles County. The City is located in the proximity of four major freeways and dozens of industrial sites. The city is densely populated with more than 11,483 (2010 Census) people per square mile. More than half the current housing stock was built before 1970, and housing costs account for an average of 36.8 percent of total household income for most renters.

Like many cities in the Gateway Cities region, Paramount's current land use patterns are the product of a legacy of mid-century County planning during a time when the area was open agricultural land mixed with scant residential development. With this project, we aim to reorient unsustainable Planning practices and further City goals that center our residents. This project will improve relationships with our residents and make air monitoring accessible. Like most of Los Angeles County, clean air is essential to all of City of Paramount's community members. The City is dedicated to ensuring our residents to continue to thrive in their city.

Figure 1: From the California Healthy Places Index (HPI)





The California Healthy Places Index (HPI) is a new tool, developed by the Public Health Alliance of Southern California, to assist in exploring the local factors that predict life expectancy and comparing community conditions across the state. The HPI provides overall scores and more detailed data on specific policy action areas that shale health, housing, transportation, and environmental issues. Figure 1 illustrates percentage of clean environment conditions compared to other California census tracts. As illustrated in subfigures 1A through 1E, the five air monitoring sites contain the lowest health index scores concerning clear air PM and diesel which ranks low in the HPI score percentile for healthy conditions.

In September 2018, the Paramount City Council adopted Ordinance No. 1 106 for Zoning Ordinance Text Amendment No. 8, which revised manufacturing regulations in response to high and unhealthful levels of hexavalent chromium and other air emissions.

One critical change is a new mandate for all businesses that require permits from South Coast Air Monitoring Management District (SCAMD) to obtain a comprehensive City administrative permit. The purpose of the administrative permit is to allow the City and community to have a complete understanding as to how metal-related manufacturing businesses operate. Applications would contain a catalog of equipment, materials, and uses.

The City also took extensive strides on its own: hiring consultants to translate monitoring results and other scientific data; contacting legislative representatives for counsel; addressing the SCAQMD Board and the County Board of Supervisors; sending letters to targeted companies asking for their help in resolving the problem. To give time for reflection and research, Paramount quickly enacted an 18-month moratorium on all new metal businesses opening in town and any expansion of existing ones.

Section 4- Environmental Justice and Underserved Communities

Expected Project Outputs and Outcomes

The City of Paramount seeks federal funding from the Enhanced Air Quality Monitoring for Communities grant from the Environmental Protection Agency (EPA) to continue to track the ambient air monitoring program intended to measure and monitor possible community exposure to Hexavalent Chromium (Cr(VI)) and ensure metal-related businesses who produce Cr(VI) emissions are not emitting pollutants at harmful levels.

These are the five expected outputs and outcomes:

1. Provide descriptions of the data collection and analysis efforts
2. Illustrate how monitoring equipment will be integrated, operate, maintain the monitoring equipment

3. Develop and implement study designs that include current and historic data
4. Define the Data Quality Objectives (DQOs) and illustrate how they will be met
5. Include all Standard Operating Procedures (SOPs) for the project

Performance Measure and Plan

Over the last three months, air quality samples have indicated hexavalent chromium levels remain below thresholds set by SCAQMD. Despite regular air monitoring in Paramount over the last several years, contracted air monitoring services bring an unconventional approach for a City. Figure one shows the history of a four month period of air monitoring readings from November 18, 2021 through March 6, 2022.

PARAMOUNT HEXAVALENT CHROMIUM MONITORING RESULTS (ng/m^3)

ENVIRONMENTAL INFORMATION PORTAL

Sample Date	City Hall	Watercraft (Garfield & Jackson)	Press Forge (Minnesota & Jackson)	Aerocraft (Madison & Minnesota)	Wesley Gaines Elementary School	Lincoln Elementary School	Comments
11/18/2021	0.020	NS	NS	NS	NS	NS	
11/24/2021	0.045	NS	NS	NS	NS	NS	
11/30/2021	0.023	NS	NS	NS	NS	NS	
12/6/2021	0.046	NS	NS	NS	NS	NS	
12/12/2021	0.051	NS	NS	NS	NS	NS	
12/18/2021	0.032	0.029	NS	0.262	NS	NS	
12/24/2021	0.190	0.056	NS	0.061	NS	NS	
12/30/2021	0.048	1.765	NS	0.251	NS	NS	
1/5/2022	0.096	0.479	NS	0.186	NS	NS	
1/11/2022	0.249	0.242	NS	0.693	0.263	0.265	
1/17/2022	0.112	0.449	NS	0.349	0.180	0.088	
1/23/2022	0.085	0.031	NS	0.089	NS	0.016	
1/29/2022	0.142	0.050	NS	0.176	NS	0.066	
2/4/2022	N/S	0.261	NS	2.096	0.172	0.123	
2/10/2022	0.283	0.169	NS	1.238	0.122	0.240	
2/16/2022	0.030	0.325	NS	0.400	0.240	0.025	
2/22/2022	0.452	<DL	NS	1.067	0.021	0.201	
2/28/2022	0.086	NS	0.147	0.535	0.056	0.078	
3/6/2022	0.219	NS	0.108	0.033	0.067	0.201	

Notes:
NS means samplers were not operating due to a variety of reasons such as limited access, weather, samplers under repair, not setup, etc.
Invalid means sample collected was invalid due to a variety of reasons such as power loss, equipment malfunction, etc.
<DL means less than detection limit of 0.028 for Omni Sampler 0.012 for PQ100

Figure 1

T&B Systems will provide a full year of sample collection on a 1:6-day schedule (61 sample days x five samplers). It is assumed that a midnight-to-midnight sample period is desired. Filters will be collected on the first day following the completion of the sampling period, and packaged and shipped immediately overnight to the laboratory in coolers containing blue ice. In the event that weekend or holiday schedules impact delivery, samples will be stored in a freezer until shipping is possible. The routine 6-day visits to the sites will include visual site inspections, diagnosis and repair of equipment problems, verify sampler clock accuracy and sample runtimes, replacement of sensors, if necessary, routine operational maintenance of monitoring equipment, and documentation and reporting of all problems and resolutions to project management.

Timeline and Milestones

The existing air monitoring effort has been budgeted to operate for a one-year period.

Milestone	Completion Date
Installation of meteorological station and start of routine Cr(VI) sampling (1/6-day sampling) for a 1-year period	October 2021 – November 2022
Semi-Annual Community Meeting	May 2022

Final Community Meeting	November 2022
City Council Meetings	Every 1st and 3rd Tuesday of the month

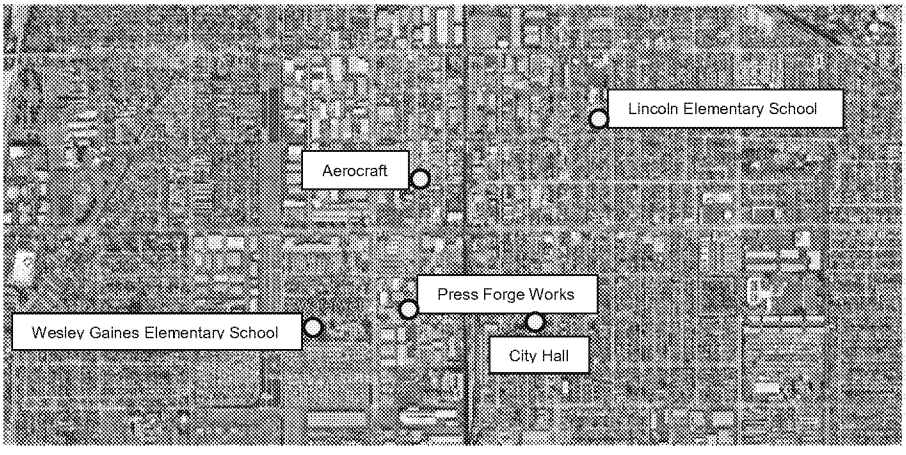
Figure 2 Estimated project timeline for existing budgeted air monitoring system

Continued operation of the network for an additional two years can be easily extended as additional funding is made available through the EPA grant for Enhanced Air Quality Monitoring for Communities.

- November 2022 – November 2023: Routine sampling of meteorological station and Cr(VI) sampling (1/6-day sampling):
- November 2023 – November 2024: Routine sampling of meteorological station and Cr(VI) sampling (1/6-day sampling):

With expertise and guidance from the South Coast Air Quality Management District (SCAQMD) on September 21, 2021, the City Council unanimously voted to award a contract for air monitoring services to T&B Systems. T&B Systems' brings years of experience in providing high-quality air monitoring services. For the next year, T&B Systems will take air samples in five locations throughout the City to monitor levels of hexavalent chromium.

The monitoring program will consist of the collection of integrated 24-hour samples every six days (1/6) at five (5) sites in the community approved by Paramount.



Section 5- Quality Assurance Statement

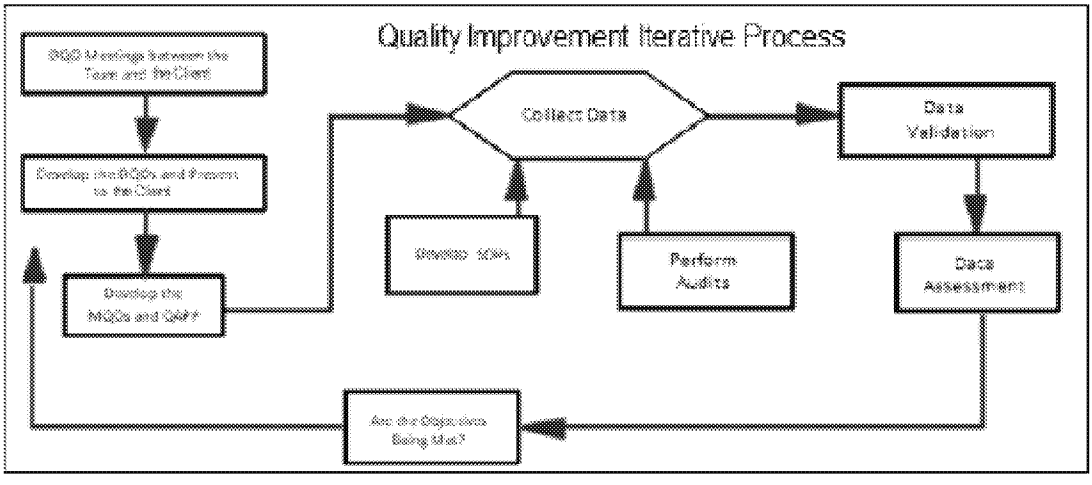
The Quality Assurance Project Plan (QAPP) detailing operating procedures, quality control criteria, standard operating procedures (SOPs) and other information consistent with good, professional air quality and meteorological practices. This will ensure that the resulting data are usable for the intended analyses for this research project and provide both reliable real-time data and a defensible, validated final data set. T&B Systems is working closely with Paramount and SCAQMD personnel as to develop the QAPP.

In order to accomplish the monitoring objectives outlined in the RFP, T&B Systems propose implementing the EPA Data Quality Objectives (DQOs) process. The DQOs are a tool that can be used to bring the objectives of a project into focus. This allows the monitoring objectives into a more concrete approach so that the City and the T&B Systems both understand how the objectives translate into actual monitoring. The DQOs are a strategic planning approach used to

verify that environmental data that is collected will produce data of sufficient quality to meet the needs of decision makers. Since the City is the decision maker, it is imperative that T&B Systems work closely with Paramount and SCAQMD to make sure all data collected by T&B Systems meets these required needs.

The formal DQO process consists of seven steps to ensure that the experimental design will meet specific decision criteria specified by decision makers and other stakeholders. Below are the seven steps:

1. State the problem
2. Identity the decision
3. Identity the inputs to the decision
4. Define the study
5. Develop a decision rule
6. Specify tolerable limits is on decision errors
7. Optimize the design



The workplan is a planning document that illustrates how the monitoring that will be operated and maintained in order to satisfy the DQOs and the needs of the decision maker. The workplan will:

- Prove descriptions of the data collection and analysis efforts
- Illustrate how monitoring equipment will be integrated, operate, maintain the monitoring equipment
- Develop and implement study designs that include current and historic data
- Define the DQOs and illustrate how they will be met
- Include all Standard Operating Procedures (SOPs) for the project

T&B Systems in general follows the EPA guidance document EPA QA/G-5 - Guidance for Quality Assurance Project Plans to develop the QAPP. Since this is not a regulatory project, some of the recommendations in the guidance will not be applicable. However, we will still be addressing the primary elements of the guidance, which include the following:

- Project Management
- Data Generation and Acquisition
- Assessment and Oversight
- Data Validation and Usability

Section 6 - Programmatic Capability and Past Performance

Past Performance

In the past three years, the City of Paramount has been an award recipient of federal funding from the Justice Assistance Grant program administered by the Department of Justice; the Coronavirus Supplemental Emergency Funding Grant program administered by the Department of Justice; and DR-4482 Streamline Project Application Grant program administered by the Federal Emergency Management Agency. For each federal grant awarded, the City's grant project administrators successfully achieved the goals and objectives description in each program narrative and delivered quarterly performance and financial reports to the corresponding federal agencies.

7. Budget

Budget Detail: Below is the budget table with the itemize cost of T&B Systems existing air monitoring effort. The budget to operate for a one-year period totals $159,877. We are requesting to continue the air monitoring service for an additional two years.

Line Item & Itemized Cost	EPA Funding
Personnel	
(1) Principal @ $195/hr x 10hrs	$1,950
(2) Program Manager @ $175/hr x 52hrs	$9,100
(3) Senior Scientist @$170/hr x 44hrs	$7,480
(4) Scientist III @ $137/hr x 68hrs	$9,316
(5) Senior Technician @ $94 x 562hrs	$52,828
TOTAL PERSONNEL	$80,674
Fringe Benefits	
Not applicable	
TOTAL FRINGE BENEFITS	$0
Travel	
Local Mileage: 0.56 unit cost x 6,800 units	$3,808
TOTAL	$3,808
Equipment	
Certified NIST Meteorology Standards: 50 unit cost x 2 units	$100
Certified NIST Flowrate Calibrator: 150 unit cost x 5	$750
TOTAL EQUIPMENT	$850
Supplies	
Supplies/Spare Parts: 1,000 unit cost x 1 unit	$1,000
Meteorlogical Station (WS, WD, TEMP, RH, Datalogger, Cell Modem, Tripod)- 5,500 unit cost x 1	$5,500
Chest LabNet Analysis (5 sites, 1/6 day sampling, expedited, 10% blanks, 10 spares)- 168 unit cost x 345 units	$57,960
TOTAL SUPPLIES	$64,460
Contractual	
Website Fee (Monthly)- 50 unit cost x 12	$600

Shipping (to and from Chester, 1/6 days sampling)- 140 unit cost x 61	$8,540
TOTAL CONTRACTUAL	$9,140
Other	
Meals- 15 unit cost x 63	$945
TOTAL OTHER	$945
Indirect Charges	
Not applicable	
TOTAL INDIRECT	$0
TOTAL FUNDING	
November 2022-November 2023	**$159,877**
November 2023-November 2024	**$159,877**
TOTAL PROJECT COST	**$319,754**